



<http://www.mn-arts.org/>

May 2015 Edition

May Meeting Minutes

Chuck Stroud, KA8HDE, called the meeting to order at 1:00 PM. 19 were in attendance.

Introductions were made which included everyone's favorite ham radio activity.

A reminder that next Saturday was the first HF in the Park for the season.

<http://hamoperator.com/Park/2015/Ham sinthePark.html>

Ozarkcon was reviewed. Three members attended.

- Les Bearl, N0PPF won an Arduino kit. Les explained how he has been experimenting with it. He also won a 4 States Minimalist Tranceiver.
- There was a presentation on a DXpedition to the North Pole and a good swap meet.

Les Bearl, N0PPF reported on the recent Northern Lights VHF Conference which was held in White Bear.

April Minutes were approved.

Paul Bushouse, N0TYE, reports that there is 1875.88 in the account. He is still collecting dues.

Old Business:

- There are still some uncollected name tags.

The Spirit of Field Day

Hi MN-ARTs experimenters,

At the May meeting we talked about an activity for our upcoming June 6 meeting.

As a background, every year, on the fourth full weekend in June, the ARRL sponsors its annual Field Day. This year our club will not be having a club station at a remote location, with temporary antennas and operating for as much of the 27 hour period as possible. Many of you already participate with other clubs in the area and we encourage you to do this again.

However, we still want to strongly encourage each of you to participate in the spirit of Field Day in your own way. Since one of the primary justifications for the Amateur Radio Service is that we, as amateurs, be willing and able to assist in emergency communication situations when called upon, we want to encourage our individual and collective abilities in the following manner.

Each person should be interested in demonstrating and testing his/her personal capabilities of being able to assist in emergency communications if called upon. If possible, every person should do enough work on amateur radio equipment (radios and accessories) that you can get on the air. This is hopefully a progressive activity that can built upon each year.

To start off our Field-Day Month, at our June 6 MARTS meeting we are encouraging everyone to test your own VHF/UHF capabilities. Dig out your radios, batteries, owner's manuals, and get familiar with your radios again. If you don't use them you WILL forget, and batteries age or get lost as do chargers. At this June 6 meeting we will give points for everyone that comes, brings a 2-meter radio and "checks in" with Paul on the simplex monitoring frequency 146.520 MHz. Multiple 2-meter radios (handheld or mobile) would give extra points. In addition, bring your 70cm / 440 MHz UHF radios and check in on the 440 simplex calling frequency of 446.000 MHz. More points!

After everyone gets a chance to check in on the simplex calling frequencies we will see about changing to another frequency. This alternate frequency may or may not be in the repeater range (we will find a frequencies with no repeaters around) so you will have to know how to turn the automatic repeater offset in your radio off. Yes, dig out your manuals and figure out how to do this. It may be crucial for an emergency. Repeaters may all be down or occupied.

After the check-in and self-scoring our program for the meeting will be to talk

about our individual Field Day plans. We want to encourage each of you to do some experiments on your own - something related to a field emergency that you could possibly put into service if you were called upon at an unexpected time. Maybe you want to experiment with operating one or more of your radios on a temporary setup (picnic table in backyard or at a park) with battery power and a temporary antenna. You don't have to run the entire 24-hour contest but perhaps make a contact or two. This would be terrific, and a valuable exercise because this time it's YOUR radio, antenna, power, cables and setup. Perhaps you just want to experiment with some aspect of this - such as building a field-deployable antenna, or a solar battery charging system.

Along this line, here are some ideas to think about. You won't do all of these but hopefully there are some ideas here to whet your appetite.

1) Do more with your handheld radio. It could be VHF or UHF or multi-band. Get it on the air and make at least one contact with another amateur. Progressive steps would be to attempt contacts in different modes. Make a contact on the 2 meter simplex calling frequency (146.52). Make a contact via a repeater. Attach a more efficient antenna (J-pole, yagi, quad, whatever) to increase your range.

2) Demonstrate your mobile radio capability. Use whatever radio equipment you have installed (permanently or temporarily) in your car. Make at least one contact. Progressive steps would be to make contacts in

different modes - simplex, repeaters, etc. Maybe use an alternate, temporary antenna to increase your range.

3) Demonstrate your ability to increase the range of your dual-band handheld radio by using crossband repeating through your mobile radio. Find out about this! It's really neat and could be very important if you can do it and need it someday.

4) Put an HF radio on the air and make one or more contacts. Demonstrate the use of different power sources, battery, solar, bicycle power, whatever. Use whatever antennas you want to use. Maybe a hamstick attached to a tripod, maybe a vertical, maybe a dipole thrown up in a tree. Use an antenna tuner if you want to. Use SSB and/or CW (preferably both). Use a computer with a digital interface to make contacts using FSK, PSK31, and other digital modes.

5) Demonstrate your ability to pass computer data (spreadsheets with lists of names, phone numbers, etc) via your VHF/UHF radio and/or your HF radio to other stations. Demonstrate your capability of passing messages to other stations at various distances from your station. This may mean different amateur bands, different modes, different speeds, etc.

6) Demonstrate your ability to get on the air using ONLY the equipment in your personal "go-pack", containing your personal radio equipment that you can carry in your vehicle at all times, to make at least one contact. List your equipment in your go-pack in your personal log. Demonstrate that you have all the connectors, wires, power sources, etc,

Whatever you do this year, keep track of everything you did in a personal log book. This will be your personal record of your good and bad experiences, things that you were missing and wish you had along, and things you would like to improve upon for next year. Everyone is encouraged to help others, of course. You can certainly share your equipment, knowledge, and possibly your tree climbing ability.

Make sure you have fun! Nevertheless, remember that this is a serious activity but nobody will be ever able to do EVERYTHING. The important thing is that you know you can do SOMETHING to help out in an emergency. That's what it's all about, isn't it?

After the Field Day, spend some time with your personal log. Think about what you would like improve upon before next year. Possibly buy some new piece of equipment, experiment with a new installation, a new antenna, additional knowledge and capabilities. Consider taking the FEMA and/or ARRL Emergency Communications courses. Consider taking part in training exercises during the year. Remember that you don't have to do everything! The many possible capabilities can be a daunting (and possibly expensive) so don't worry about it but think about ONE ADDITIONAL STEP that you would like to take this year, I think you will (and should) feel good about this.

We will have wrap-up where we discuss your Field Days activities at a future meeting.

- Craig/AA0ZZ

Show & Tell

Leon Dill, W0COE, brought in 3 way AC plug adapters for everyone. Thank you Leon!!

Steve Ulrich, NW0C, brought in an article from the recent CQ issue which had a very nice write up on Craig's (AA0ZZ) latest keyer kit.



Craig Johnson, AA0ZZ, showed us an update he recently made to his 40 meter receiver. He updated the VFO so that it tunes smoother. He is also in the process of designing a case for the project.



Jeremy Mooney, KC0LDI, brought in a small Wi-Fi bridge with a built in processor. The one he had was an ESP12.



John Faughn, KD0CAC, spoke about software defined antennas.

Ted Kinnear, KD0NPJ, followed up on the rope knots he showed us last month with a safety knot that will prevent the rope from slipping off the pipe. He also showed how to attach a vise grip to improve the grip.



May Presentation

Russ Ramirez, K0WFS, spoke on the subject of Op Amps. He started off with a bit of history and then followed up with ideal models, op amp parameters and power supply rails. He showed us some practical implementations in the form of filters. Russ promised a follow up presentation. You can see his informative PowerPoint slides on the web site.



Respectfully submitted,
Steve, NW0C

Club Officers:

President: Chuck Stroud/KA8HDE
Vice Pres: Russ Ramirez/K0WFS
Secretary: Steve Ulrich/NW0C
Treasurer: Paul Bushouse/N0TYE
At Large: Craig Johnson/AA0ZZ

ka8hde79@gmail.com
russ.ramirez@gmail.com
ulrichs@comcast.net
p-bushouse@bethel.edu
aa0zz@cbjohn.com